

On the analysis of discounted aggregate claim costs until ruin in two-sided jump model

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Abstract

The classical Gerber-Shiu function is well known for its unified study of three crucial ruin quantities, namely the time of ruin, the surplus just before ruin and the deficit at ruin. In the past decade, there has been an increased interest in its extensions. In particular, Cheung and Woo (2014) incorporate the discounted aggregate claim costs until ruin into the Gerber-Shiu function which allows us to find more interesting ruin quantities, such as the conditional covariance of the discounted aggregate claims until ruin and the time of ruin. In this talk, we study the extended Gerber-Shiu function under a risk model with two-sided jumps.

Keywords: Gerber-Shiu function; Discounted aggregate claim costs until ruin; Covariance; Risk model with two-sided jumps.

References

- [1] CHEUNG, E.C.K. AND WOO, J.-K. (2014) On the discounted aggregate claim costs until ruin in dependent Sparre Andersen risk processes. *Scandinavian Actuarial Journal*. In press.

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